

## **Executive summary**

The American Association of Suicidology recognizes that firearm access and storing firearms unlocked and loaded are risk factors for death by suicide. Although firearm access does not cause suicidal thoughts, it makes it more likely that suicidal individuals will die. Means safety – efforts to make methods for suicide less deadly or less available during a suicide attempt - represents a promising tool for lowering the national suicide rate through a specific focus on firearms – the most common method of suicide death in the United States. AAS believes that the success of such initiative hinges upon the development of collaborative relationships with the firearm-owning community.

STATEMENT FOR THE AMERICAN ASSOCIATION OF SUICIDOLOGY REGARDING THE ROLE OF FIREARMS IN SUICIDE AND THE IMPORTANCE OF MEANS SAFETY IN PREVENTING SUICIDE DEATHS

[February 2018]

Approximately half of all suicide deaths in the United States result from self-inflicted gunshot wounds. In 2015, over 22,000 Americans died by suicide using a firearm, a number that exceeded homicide deaths by all methods combined (18,000). An estimated 85%-95% of all suicide attempts involving firearms result in death. This stands in stark contrast to the most commonly used method, intentional overdose, in which 2-3% of attempts result in death. In other words, nearly all individuals who attempt suicide using overdose survive, and nearly all individuals who attempt using firearms die." Further highlighting the prominence of this issue, firearms are present in at least one-third of all American households, meaning that highly lethal suicide attempt methods are widely accessible across the country.

Although firearms are involved in a disproportionate amount of American suicide deaths, it is vital to note that evidence consistently indicates firearm ownership is not associated with suicidal thoughts. In other words, owning a firearm does not prompt an otherwise non-suicidal individual to suddenly develop thoughts of suicide. Instead, firearms increase the risk of death by suicide. Only a small minority of individuals who think about suicide go on to make a suicide attempt and emerging evidence indicates that, in order for an individual to make that relatively rare transition, he or she must be capable of suicide. Such capability involves, in part, access to and aptitude with lethal means for suicide. Along these lines, it appears that firearms increase the risk for death by suicide among suicidal individuals by facilitating their transition from thought to action, with that action almost universally resulting in death (whereas access to less deadly methods could facilitate a non-lethal suicide attempt). This unique role – a facilitator of action within the context of already existing suicidal thoughts – is highlighted by decades of research demonstrating that firearm access is associated with death by suicide even when accounting for who an individual is (male/female, young/old), how that individual is feeling (depression symptoms,

substance use, social isolation), whether that individual has access to proper care (population density, socioeconomic status), and whether that individual has been suicidal in the past (prior suicidal thoughts, prior suicide attempts). Firearm access increases suicide risk among all members of a home where a firearm is present, and risk is greatest when household firearms are stored unlocked and loaded.

- Approximately 50% of all American suicide deaths result from firearms
- 85%-95% of all suicide attempts involving a firearm result in death
- Firearm access is not associated with developing suicidal thoughts
- Firearm access is associated with death by suicide
- Firearms may facilitate the rare transition from suicidal thoughts to death by suicide

Fortunately, lessons learned from other public health struggles, as well as emerging evidence specific to firearms and suicide, present a blueprint for success in addressing this problem. Means safety – defined as actions that render a specific method for suicide less deadly or less accessible during a suicide attempt – represents a promising path towards reducing firearm suicides and, consequently towards lowering the overall suicide rate. This approach is often referred to as "means restriction;" however, research has demonstrated that use of the word "restriction" decreases the willingness of firearm owners to engage with the intervention.

Means safety has been applied to a range of suicide methods. For instance, the detoxification of domestic gas resulted in substantial reductions in the overall suicide rate in the UK in the mid-20th century. Reducing access to the most highly human-toxic pesticides in Sri Lanka led to a 50% drop in the overall suicide rate, driven by a drop in poisoning suicides.. When means safety is effective, it reduces the overall suicide rate by reducing the method-specific suicide rate, while suicide rates by other methods either remain flat or only marginally increase. The goal is to prevent individuals from dying, not to simply change the method by which they die. Reductions in overall suicide rates highlight the fact that, when an individual is prevented from using a specific method to die by suicide, they do not simply find another way. The effect of means safety, however, hinges upon the lethality, popularity, and accessibility of the targeted method. As such, means safety efforts in the United States must focus specifically on firearms in order to have optimal effects because firearms are the leading method, the most lethal, and easy to access.

Means safety specific to firearms can take several forms, each of which has varying levels of evidence supporting its efficacy as well as varying degrees of plausibility depending in part upon geographic location. In recent years, suicide prevention experts have collaborated with the firearm owning community to develop "gun friendly" materials, messaging, and curriculum aimed at gun-owning families. These interventions do not vilify firearms or firearm owners; they capitalize on the existing culture of gun safety and the shared goal of preventing suicide death. The primary focus of these programs is to encourage voluntarily storing firearms away from the home when a household member is at risk for suicide or otherwise making them inaccessible to the at-risk person. These programs also encourage routinely storing guns locked, not only during times of crisis. Such approaches are akin to successful efforts to curb drunk driving and to reduce the overall motor vehicle fatality rate (e.g. "friends don't let friends drive drunk"). They are non-coercive and focus on preventing an unwanted outcome

rather than demonizing firearms and risking a lack of buy-in from the firearm owning community. The collaborative approach has yielded partnerships with high profile firearm organizations (e.g. National Shooting Sports Foundation), which in turn lends credibility to such projects and increases the plausibility of large scale dissemination and implementation.

Research considering the suicide prevention potential of legislation (e.g. universal background checks, mandatory waiting periods; extreme risk protection orders) indicates that states with certain laws in place tend to exhibit lower overall suicide rates and a less severe suicide rate trajectory across time. Given the magnitude of the effect sizes reported in this research, such legislation may represent one useful tool in efforts to prevent suicide. That being said, in areas of the country in which firearm ownership is substantially more common, the political feasibility of such legislation is lower, rendering the potential reach of at least certain forms of the intervention limited.

- Means safety rendering suicide methods less deadly or less accessible during a suicide attempt
- Important to avoid alienating terms such as "restriction"
- Means safety has demonstrated effectiveness across many suicide methods
- Legislation regulating handgun ownership (e.g. background checks) may be effective but less palatable
- Collaboration with firearm community is paramount to success
- Encourage safe storage store firearms locked, unloaded, separate from ammunition, in secure location
- Encourage storing firearms away from home when a household member is at increased risk of suicide

Research examining the effectiveness of non-legislative means safety approaches is currently lacking and such data should be a focus of suicide research in the coming years. As research is conducted in this area, other potentially fruitful avenues for increasing effectiveness and reach include promoting the use of lethal means counseling; improving locking technologies; and increasing access to and knowledge about safe and legal options to temporarily store firearms during times of crisis. An important consideration is the target population for such interventions. One possible route is to focus on high risk individuals such as those seeking mental health care and/or endorsing suicidal thoughts. Such approaches would focus on ensuring that individuals we have identified as being at high risk for suicide take steps to reduce their access to specific methods for suicide.

Although these are certainly valuable groups to consider, an argument could be made that a better approach is to aim for population level implementation regardless of known risk. Recent research indicates that we have not improved in our ability to prospectively predict suicide risk since the 1950s. This failure has many explanations, but one component is likely that the individuals most likely to die by suicide, particularly those who would die using a firearm (e.g. men in general, middle aged or older white men, military personnel) tend to avoid mental health care altogether and to underreport thoughts of suicide. Because of this, we are typically ill equipped to identify individuals at risk for suicide until they are dead. By implementing means safety at the population level, we can diminish our reliance upon correctly identifying individual risk levels and instead ensure our communities as a whole are at lower risk of suicide death regardless of current suicidal thoughts. As such, although we do not oppose

approaches that target high risk individuals, we would see such efforts as needing to be one component of a multifaceted approach that also includes population level prevention initiatives.

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